CENTRAL PNEUMATIC®

18 Gauge Air Brad Nailer

Model 42528

ASSEMBLY AND OPERATION INSTRUCTIONS



3491 Mission Oaks Blvd., Camarillo, CA 93011 Visit our Web site at http://www.harborfreight.com

TO PREVENT SERIOUS INJURY,
READ AND UNDERSTAND ALL WARNINGS
AND INSTRUCTIONS BEFORE USE.

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For technical questions and replacement parts, please call 1-800-444-3353

SPECIFICATIONS #42528 AIR BRAD NAILER

| Air Inlet Size: | | ¹ / ₄ " NPT (Female) | Operating Pressure: | 55 to 95 psi |
|-----------------|----------|--------------------------------------------|---------------------|---------------------------------------------------------------------------------|
| Brads: | Type: | .039042" Shank (18 Ga.) Medium Head | Magazine Capacity: | 100 brads |
| | | | Trigger: | Contact Type |
| | Length: | $^{3}/_{8}$ " to 1- $^{3}/_{16}$ " | Overall Dimensions: | 10- ¹ / ₄ " L x 2" W x 7- ³ / ₈ " H |
| | Example: | SKU 33205 | Net Weight: | 2.20 Lbs. |

FEATURES OF THIS AIR BRAD NAILER

- 1. This lightweight yet powerful air nailer will make short work of most nailing jobs.
- 2. $\frac{1}{4}$ " NPT air inlet size accepts most often used shop size air hose adapters.
- 3. Safety trigger will not discharge unless the nailer is in contact with a surface.
- 4. 100 brad magazine capacity reduces down time for reloading.
- 5. Wide range of brad sizes makes this the right nailer for most jobs.
- 6. Sturdy die-cast aluminum and steel construction assures long service life.

Save This Manual

You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

Safety Warnings and Precautions



WARNING: When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

Read all instructions before using this tool!

- 1. **Keep work area clean**. Cluttered areas invite injuries.
- 2. **Observe work area conditions**. Do not use machines or power tools in damp or wet locations. Do not expose to rain. Keep work area well lit. Do not use electrically powered tools in the presence of flammable gases or liquids.
- 3. **Keep children away**. Children must never be allowed in the work area. Do not let them handle machines, tools, extension cords, or air hoses.
- 4. **Store idle equipment**. When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
- 5. **Use the right tool for the job**. Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. There are certain applications for which this tool was designed. It will do the job better and more safely at the rate for which it was intended. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
- 6. **Dress properly**. Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.

- 7. **Do not overreach**. Keep proper footing and balance at all times. Do not reach over or across running machines or air hoses.
- 8.

Use eye and ear protection. <u>Always</u> wear ANSI approved impact safety goggles and appropriate hearing protection. Wear a full face shield if you are producing metal filings or wood chips. Wear an ANSI approved dust mask or respirator when working around metal, wood, and chemical dusts and mists. Other people in the work area must also wear ANSI approved impact safety goggles.

- 9. Maintain tools with care. Keep tools clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords and air hoses periodically and, if damaged, have them repaired by an authorized technician. The handle must be kept clean, dry, and free from oil and grease at all times. Do not operate a tool if any portion of the tool's operating controls are inoperable, disconnected, altered or not working properly.
- 10. **Disconnect Air Hose and release any built-up air pressure**. Never service the Nailer, clear jams, or disassemble with the air hose attached. Always release any built-up air even after disconnecting hose. Disconnect the Nailer when not in use.
- 11. **Remove adjusting keys and wrenches**. Check that keys and adjusting wrenches are removed from the tool or machine work surface before attaching to an air source.
- 12. **Avoid unintentional starting**. Be sure the trigger is in the Off position when not in use and before plugging in. Do not carry any tool with your finger on the trigger, whether it is attached to an air source or not. Do not point the tool towards yourself or anyone whether it contains fasteners or not.
- 13. **Stay alert**. Watch what you are doing, use common sense. Do not operate any tool when you are tired.
- 14. Check for damaged parts. Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if the trigger does not operate properly.
- 15. **Guard against electric shock**. Prevent body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerator enclosures.
- 16. Replacement parts and accessories. This product is to be repaired and serviced only by a qualified technician. When this product is serviced, only identical replacement parts should be used. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Harbor Freight Tools.
- 17. **Do not operate tool if under the influence of alcohol or drugs**. Read warning labels if taking prescription medicine to determine if your judgement or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.
- 18. **Use proper size and type extension cord**. If an extension cord is required, it must be of the proper size and type to supply the correct current to the compressor without heating

- up. Otherwise, the extension cord could melt and catch fire, or cause electrical damage to the tool. Check your air compressor's manual for the appropriate size cord. It is also possible that the use of an extension cord may cause your circuit breaker to trip or your panel fuse to break. If this happens, either use the compressor without an extension cord or find a larger amperage circuit to use.
- 19. **Maintenance**. The maintenance outlined in the maintenance section should be performed regularly. For your safety, this product should be serviced or repaired regularly only by a qualified technician.
- 20. Compressed air only. Never use combustible gas as a power source.
- 21.
 - **Do not load nails with the trigger or safety depressed.** Unintentional firing may occur. Do not load nails when the air hose is connected to the tool. Always assume that the tool contains fasteners.
- 22. **Disconnect air supply before loading Nailer**. Before reloading (or making any adjustments to) the Nailer make sure that the compressed air is disconnected.
- 23. **Fire fasteners into an appropriate work surface only**. Do not attempt to fire fasteners into surfaces too hard to penetrate. Do not drive fasteners on top of other fasteners, or at too steep of an angle. Fasteners can ricochet causing personal injury. Never fire the Nailer into the air, or point it toward yourself or another person. <u>Always</u> wear ANSI approved safety goggles during use, maintenance, and reloading.
- 24. **Do not fire fasteners too close to the edge of a workpiece**. They may split the workpiece and fly free, causing personal injury.
- 25. Take caution as some woods contain preservatives such as copper chromium arsenate (CCA) which can be toxic. When stapling or nailing these materials extra care should be taken to avoid inhalation and minimize skin contact.
- WARNING: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contain chemicals known [to the State of California] to cause cancer, birth defects or other reproductive harm.

Some examples of these chemicals are:

- Lead from lead-based paints
- Crystalline silica from bricks and cement or other masonry products
- Arsenic and chromium from chemically treated lumber

(California Health & Safety Code 25249.5, et seq.)

- 26. **Stay within air pressure capacity**. Never operate the Nailer above 95 PSI.
- 27. **Hold tool away from head and body**. During operation the Nailer may kick back causing injury.
- 28. **Transport Nailer safely**. Always disconnect air supply when moving the tool in the workplace. Carry the tool by the handle and avoid contact with the trigger.

Note: Performance of the compressor (if powered by line voltage) may vary depending on variations in local line voltage. Extension cord usage may also affect tool performance.

Warning: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Unpacking

When unpacking, check to make sure the parts listed on page 9 are included. If any parts are missing or broken, please call Harbor Freight Tools at the number on the cover of this manual as soon as possible.

INCLUDED ACCESSORIES

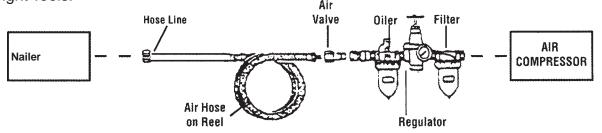
3mm Hex Wrench Tool Oil

4mm Hex Wrench Assorted O-rings*

*NOTE: Although spare assorted O-rings are included, these parts are for installation by a qualified technician only.

Operation

For best service, you should incorporate an oiler, regulator, and inline filter, as shown in the diagram below. Hoses, couplers, oilers, regulators, and filters are all available at Harbor Freight Tools.



Recommended Air Line Components

Note: To connect this tool, we recommend a quick coupler/adapter (not included). Coupler/ adapters are available at Harbor Freight Tools. For smoother operation, put 3-5 drops of pneumatic tool oil in the Air Plug (A-04) before each use.

Testing the Contact Safety Trip Mechanism

Warning: Even though the nailer should be empty during this procedure, ALWAYS point the nailer at a piece of scrap wood when testing.

- 1. Make sure the tool is disconnected from the power supply.
- 2. Completely empty the magazine of nails.
- 3. The Nailer should not fire if the nose is not depressed against the workpiece.
- 4. Check that the Trigger (A-26) and the Nose Piece (3-11) move freely, without sticking see *Figure 1*, next page.
- 5. Connect the air supply to the tool at the Air Plug (A-04) set at the recommended 55-95 PSI, and **not to go over the maximum 95 PSI**.

- 6. Test the tool by depressing the Nose Piece (3-11) against the workpiece without pulling the Trigger (A-26). **The tool must not cycle (fire)**. If it cycles (fires), stop immediately and have the tool repaired by a qualified service technician.
- 7. Hold the tool away or off of the workpiece. The Nose Piece (3-11) of the tool should return to its original position. Squeeze the Trigger (A-26). The tool must not cycle (fire). If it cycles (fires), stop immediately and have the tool repaired by a qualified service technician.
- 8. Depress the Nose Piece (3-11) against the workpiece and squeeze the Trigger (A-26). The tool must cycle (fire) once only. Release the trigger and squeeze it again. The tool must cycle (fire) again once. With the Trigger held, carefully lift the

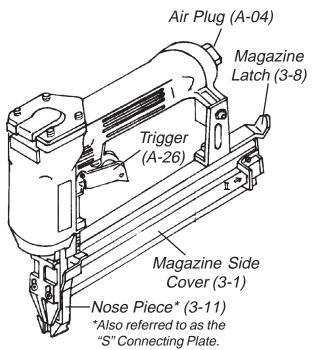


Figure 1 - Air Nailer Components

nailer and press it against the workpiece again. **The tool must cycle (fire) again once**. If it fails to cycle (fire) or fires repeatedly, have it repaired by a qualified service technician.

Loading Brad Nails



<u>ALWAYS</u> WEAR ANSI APPROVED IMPACT SAFETY GOGGLES WHEN RELOADING OR DOING ANY OTHER MAINTENANCE ON THIS TOOL. Other people in the work area must also wear ANSI approved impact safety goggles.

Warning! Make sure the Nailer is not attached to the air hose whenever loading the tool.

- 1. Press the Magazine Latch (3-8) up and slide the Magazine Side Cover (3-1) back.
- 2. Holding the nailer with the nose pointing slightly down, insert the brad nails into the Magazine Side Cover (3-1), letting the pointed end ride on the rail of the Magazine Side Cover (3-1).
- 3. After the Nails reach the nose of the tool, close the Magazine Side Cover (3-1) making sure the Magazine Latch (3-8) clicks shut. See *Figure 1*.

Operating the Nailer

- 1. Attach the Nailer to the air supply at the Air Plug (A-04). Start your compressor and check the pressure making sure it is set at the recommended 55-95 PSI and not to go over the maximum 95 PSI.
- To fire, place the nose of the Nailer on the workpiece. The Nailer should not fire if the nose is not depressed. Once depressed, gently and briefly squeeze the Trigger (A-26) once. Do not fire repeatedly. Nails could bounce off of one another, damaging the work piece or causing PERSONAL INJURY.
- 3. If the brads are being driven too far or not far enough, adjust your air pressure regulator. Continue to adjust the air pressure until the brads are driven properly.

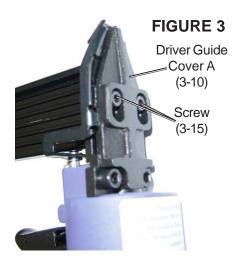
Anytime any maintenance or repairs are done (including clearing jams), FIRST:

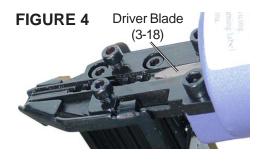
- Disconnect the Nailer from the air hose.
- 2. Empty the Magazine Unit (3-2) completely.
- 3. Attempt to fire the Nailer into a piece of scrap wood to ensure that it is disconnected and is incapable of firing any brads.
- 4. Always leave the Magazine Side Cover (3-1) open during maintenance. The Magazine is spring-loaded and may cause parts or a nail to fly out of the Nailer.

Clearing Jams

- Disconnect tool from air hose, empty the Magazine Unit (3-2) of nails, release any built-up air pressure, and leave the magazine open, as explained above.
- 2. While doing this step and the next, hold the Nailer pointed away from you and any other people or fragile objects see *Figure 2*. Loosen both Screws (3-15) on the Driver Guide Cover A (3-10) 3/4 of a turn each see *Figure 3*.
- 3. Slide the Driver Guide Cover A (3-10) toward the nose of the Nailer slightly until the holes in the Driver Guide Cover A (3-10) line up with the heads of both Screws (3-15).
- 4. Carefully remove the Driver Guide Cover A (3-10) and remove the jammed nail. Pliers may be necessary to remove a stuck nail.
- 5. Inspect the Driver Blade (3-18) for bends or breakage. If it is damaged, do not use the tool until it is repaired by a qualified technician.
- 6. Lightly oil the Driver Blade (3-18) and replace the Driver Guide Cover A (3-10). Slide the Driver Guide Cover A (3-10) away from the nose of the Nailer until the shafts of the Screws (3-15) fit into the slots in the cover. Tighten all Screws (3-15) securely.
- 7. Reload the Nailer.
- 8. Reconnect the Nailer to the air hose.
- 9. Press the Nose Piece (3-11) of the Nailer against an appropriate piece of scrap wood.
- 10. Test fire the Nailer several times, checking for proper operation.
- 11. Disconnect the Nailer, remove the nails and store Nailer in a location out of children's reach.







Anytime any maintenance or repairs are done, FIRST:

- 1. Disconnect the Nailer from the air hose.
- 2. Empty the Magazine Unit (3-2) completely.
- 3. Attempt to fire the Nailer into a piece of scrap wood to ensure that it is disconnected and is incapable of firing any brads.
- 4. Always leave the Magazine Side Cover (3-1) open during maintenance. The Magazine is spring-loaded and may cause parts or a nail to fly out of the Nailer.

Troubleshooting Guide

Stop using the Brad Nailer immediately if any of the following problems occur.

Repairs and part replacements must be done only by a qualified technician.

All procedures in bold on this chart are to be attempted only be a qualified technician.

| Problem | Likely Cause | Solution |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Air leaking at Trigger area. | O-Rings in Trigger Valve housing are damaged. | Replace O-Rings and check contact trip operation. |
| Air leaking between Housing and Nose. | Loose screws in Housing. Damaged O-Rings/Bumper (A-05). | Tighten screws. Replace O-Rings or Bumper (A-05). |
| Air leaking at Trigger Valve Stem. | O-Rings or Seals are damaged. | Replace O-Rings or Seals. |
| Air leaking between Housing and Cap. | Loose screws. Damaged Seal (A-12). | Tighten Screws. Replace Seal (A-12). |
| Runs slowly or has power loss. | Insufficient oil. Broken Spring in Cylinder Cap. Exhaust in Cap (A-14) is blocked. | Lubricate as instructed. Replace Spring (A-13). Replace damaged parts. |
| Nailer skips a nail. | Worn Bumper (A-05) or damaged Pusher Spring. Dirt in Driver Guide (3-9). Inadequate airflow to Nailer. Worn or dry O-Ring on Piston. Damaged O-Ring on Trigger Valve. Cap Seal (A-12) leaking. | Replace Bumper (A-05) or Pusher Spring. Clean channels in Driver Guide (3-9). Check hose and compressor fittings. Replace or lubricate O-Rings. Replace O-Rings. Replace Seal (A-12). |
| Nails are jammed. | Guide on driver is worn. Nails are wrong size or damaged. Magazine or Nose screws are loose. Driver Blade (3-18) is damaged. | Replace Guide. Use correct, undamaged nails. Tighten screws. Replace Driver Blade (3-18). |
| Nailer will not drive down tight. | Rounded Driver Blade (3-18) slipping off nail crown. Lack of air pressure. Slow cycling and loss of power. | Replace Driver Blade (3-18). Supply correct pressure (55-95 PSI). Check Spring (A-13) for broken coils or reduced length. Make sure exhaust in Cap (A-14) is clear. |
| Blade driving nail too deeply. | Worn Bumper (A-05) and/or Piston Spacer. | Replace either or both parts. |

All procedures in bold on this chart are to be attempted only be a qualified technician.

Parts List

| Part # | Description | Part # | Description |
|--------|---------------|--------|-----------------------|
| A-01 | Body | A-26 | Trigger |
| A-02 | O-Ring | A-27 | Pin |
| A-03 | Bottom Cap | A-28 | E-Ring |
| A-04 | Air Plug | A-29 | Nozzle Cap |
| A-05 | Bumper | A-30 | Pin |
| A-06 | Cylinder | A31 | Connecting Plate |
| A-07 | O-Ring | | |
| A-07-1 | O-Ring | 3-1 | Magazine Side Cover |
| A-08 | Collar | 3-2 | Magazine Unit |
| A-09 | Valve | 3-3 | Cover |
| A-09-1 | Stopper | 3-4 | Spring |
| A-09-2 | O-Ring | 3-5 | Pusher Guide |
| A-09-3 | O-Ring | 3-6 | Pusher |
| A-10 | O-Ring | 3-7 | Support |
| A-11 | Cylinder Cap | 3-8 | Magazine Latch |
| A-12 | Seal | 3-9 | Driver Guide |
| A-13 | Spring | 3-10 | Driver Guide Cover A |
| A-14 | Cap | 3-11 | "S" Connecting Plate* |
| A-14-1 | Screw | 3-12 | Fore Stopper |
| A-17 | O-Ring | 3-13 | Screw |
| A-18 | Seal | 3-14 | Screw |
| A-19 | Seal | 3-15 | Screw |
| A-20 | Trigger Valve | 3-16 | Screw |
| A-21 | Valve Stem | 3-17 | Screw |
| A-22 | O-Ring | 3-18 | Driver Blade |
| A-23 | Valve Guide | 3-19 | Safety Rod |
| A-24 | O-Ring | 3-20 | Snap Ring |
| A-25 | Spring | 3-21 | Spring |

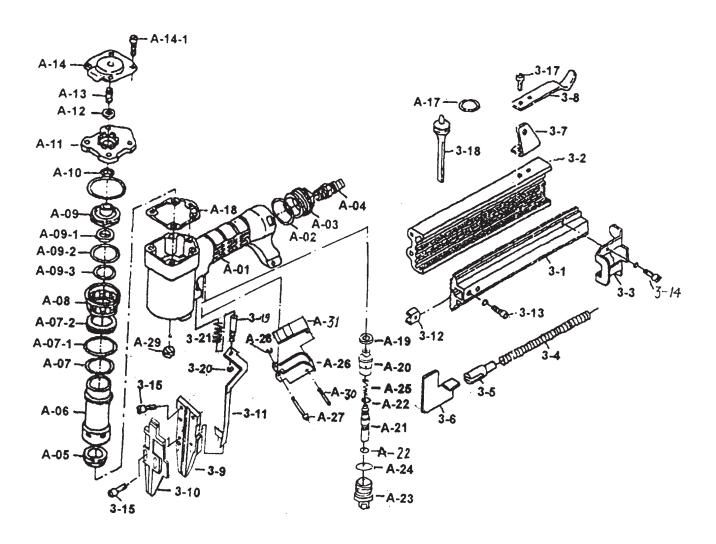
^{*}Referred to as the Nose Piece throughout this manual.

Maintenance

Warning! Always disconnect the tool from the air compressor and then empty the magazine of nails before attempting to inspect or perform maintenance to the Nailer.

- 1. Inspect all of the nuts and screws and make sure they are securely fastened.
- 2. Periodically lubricate the driving mechanism and magazine with a light oil. Wipe down with a clean cloth. Never use gasoline or flammable solvents to clean the tool.
- 3. Inspect your air compressor according to manufacturer's instructions.

Assembly Diagram



PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM AND TROUBLESHOOTING GUIDE IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER NOR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KINDTO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

NOTE: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.